

THE ASTROPHYSICAL JOURNAL LETTERS

CONTENTS OF VOLUME 542, PART 2

2000 OCTOBER 10, NUMBER 1

	Page
ON THE MASS PROFILE OF GALAXY CLUSTER C1 0024+1654 INFERRED FROM STRONG LENSING <i>Paul R. Shapiro and Ilian T. Iliev</i>	L1
GALACTIC CONTAMINATION IN THE QMAP EXPERIMENT <i>Angelica de Oliveira-Costa, Max Tegmark, Mark J. Devlin, L. M. Haffner, Tom Herbig, Amber D. Miller, Lyman A. Page, Ron J. Reynolds, and S. L. Tufte</i>	L5
SEARCHING FOR MACHOs IN GALAXY CLUSTERS <i>Geraint F. Lewis, Rodrigo A. Ibata, and J. Stuart B. Wyithe</i>	L9
ON THE INTEGRATED SPECTRUM OF THE X-RAY BINARIES AND THE ORIGIN OF SOFT X-RAY EMISSION FROM THE BULGE OF M31 <i>Konstantin N. Borozdin and William C. Priedhorsky</i>	L13
POWER DENSITY SPECTRA OF GAMMA-RAY BURST LIGHT CURVES: IMPLICATIONS ON THEORY AND OBSERVATION <i>Heon-Young Chang and Insu Yi</i>	L17
OPTICAL VARIABILITY OF THE T TAURI STAR HH 30 IRS <i>Kenneth Wood, Scott J. Wolk, K. Z. Stanek, George Leussis, Keivan Stassun, Michael Wolff, and Barbara Whitney</i>	L21
A NEW LOOK AT SIMPLE INHOMOGENEOUS CHEMICAL EVOLUTION <i>M. S. Oey</i>	L25
VERY LARGE TELESCOPE OBSERVATIONS OF THE PECULIAR GLOBULAR CLUSTER NGC 6712: DISCOVERY OF A UV, H α -EXCESS STAR IN THE CORE <i>Francesco R. Ferraro, Barbara Paltrinieri, Francesco Paresce, and Guido De Marchi</i>	L29
RADIATION PRESSURE INSTABILITY AS A VARIABILITY MECHANISM IN THE MICROQUASAR GRS 1915+105 <i>A. Janiuk, B. Czerny, and A. Siemiginowska</i>	L33
A 700 YEAR-OLD PULSAR IN THE SUPERNOVA REMNANT KESTEVEN 75 <i>E. V. Gotthelf, G. Vasisht, M. Boylan-Kolchin, and K. Torii</i>	L37
X-RAY TIMING OF THE 34 MILLISECOND BINARY PULSAR SAX J0635+0533 <i>Philip Kaaret, Giancarlo Cusumano, and Bruno Sacco</i>	L41
PROBING THE PROPERTIES OF NEUTRON STARS WITH TYPE I X-RAY BURSTS <i>Jeremy S. Heyl</i>	L45
DETECTION OF A COMPACT X-RAY SOURCE IN THE SUPERNOVA REMNANT G29.6+0.1: A VARIABLE ANOMALOUS X-RAY PULSAR? <i>G. Vasisht, E. V. Gotthelf, K. Torii, and B. M. Gaensler</i>	L49
HUBBLE SPACE TELESCOPE SPECTROSCOPY OF SPOT 1 ON THE CIRCUMSTELLAR RING OF SN 1987A <i>Eli Michael, Richard McCray, C. S. J. Pun, Peter Garnavich, Peter Challis, Robert P. Kirshner, John Raymond, Kazimierz Borkowski, Roger Chevalier, Alexei V. Filippenko, Claes Fransson, Peter Lundqvist, Nino Panagia, M. M. Phillips, George Sonneborn, Nicholas B. Suntzeff, Lifan Wang, and J. Craig Wheeler</i>	L53
DRIVING THE GRAVITY-MODE PULSATIONS IN γ DORADUS VARIABLES <i>Joyce A. Guzik, Anthony B. Kaye, Paul A. Bradley, Arthur N. Cox, and Corinne Neuforge</i>	L57
TWO CLASSES OF SOLAR PROTON EVENTS DERIVED FROM ONSET TIME ANALYSIS <i>Sâm Krucker and R. P. Lin</i>	L61
LUMINOUS EFFICIENCY IN HYPERVELOCITY IMPACTS FROM THE 1999 LUNAR LEONIDS <i>L. R. Bellot Rubio, J. L. Ortiz, and P. V. Sada</i>	L65
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

2000 OCTOBER 20, NUMBER 2

THE EARLIEST LUMINOUS SOURCES AND THE DAMPING WING OF THE GUNN-PETERSON TROUGH <i>Piero Madau and Martin J. Rees</i>	Page L69
QUASAR STRÖMGREN SPHERES BEFORE COSMOLOGICAL REIONIZATION <i>Renyue Cen and Zoltan Haiman</i>	L75
ULTRAVIOLET GALAXY COUNTS FROM SPACE TELESCOPE IMAGING SPECTROGRAPH OBSERVATIONS OF THE HUBBLE DEEP FIELDS <i>Jonathan P. Gardner, Thomas M. Brown, and Henry C. Ferguson</i>	L79
CO IN STEPHAN'S QUINTET: FIRST EVIDENCE OF MOLECULAR GAS IN THE INTRAGROUP STARBURST <i>Yu Gao and Cong Xu</i>	L83
HUBBLE SPACE TELESCOPE SPACE TELESCOPE IMAGING SPECTROGRAPH IMAGING OF THE HOST GALAXY OF GRB 980425/SN 1998bw <i>J. U. Fynbo, S. Holland, M. I. Andersen, B. Thomsen, J. Hjorth, G. Björnsson, A. O. Jaunsen, P. Natarajan, and N. Tanvir</i>	L89
A PROPOSED FUNCTIONAL FORM FOR THE UPPER MASS SPECTRUM OF OLD GLOBULAR CLUSTER SYSTEMS <i>Andreas Burkert and Graeme H. Smith</i>	L95
RESPONSE OF CIRCUMNUCLEAR WATER MASERS TO LUMINOSITY CHANGES IN AN ACTIVE GALACTIC NUCLEUS <i>David A. Neufeld</i>	L99
COMPLEX SPECTRAL VARIABILITY FROM INTENSIVE MULTIWAVELENGTH MONITORING OF MARKARIAN 421 IN 1998 <i>T. Takahashi, J. Kataoka, G. Madejski, J. Mattox, C. M. Urry, S. Wagner, F. Aharonian, M. Catanese, L. Chiappetti, P. Coppi, B. Degrange, G. Fossati, H. Kubo, H. Krawczynski, F. Makino, H. Marshall, L. Maraschi, F. Piron, R. Remillard, F. Takahara, M. Tashiro, H. Terasranta, and T. Weekes</i>	L105
THE GLOBAL NORMAL DISK OSCILLATIONS AND THE PERSISTENT LOW-FREQUENCY QUASI-PERIODIC OSCILLATIONS IN X-RAY BINARIES <i>Lev Titarchuk and Vladimir Osherovich</i>	L111
A Ly α BRIGHT JET FROM A HERBIG Ae STAR <i>David Devine, C. A. Grady, R. A. Kimble, B. Woodgate, F. C. Bruhweiler, A. Boggess, J. L. Linsky, and M. Clampin</i>	L115
DEUTERIUM BURNING IN SUBSTELLAR OBJECTS <i>G. Chabrier, I. Baraffe, F. Allard, and P. Hauschildt</i>	L119
DISCOVERY OF A SUBARCSECOND RADIO BINARY ASSOCIATED WITH THE SVS 13 STAR IN THE HH 7-11 REGION <i>Guillem Anglada, Luis F. Rodríguez, and José M. Torrelles</i>	L123
CANONICAL TIMING AND SPECTRAL BEHAVIOR OF LMC X-3 IN THE LOW/HARD STATE <i>Patricia T. Boyd, Alan P. Smale, Jeroen Homan, Peter G. Jonker, Michiel van der Klis, and Erik Kuulkers</i>	L127
THE ORBIT OF THE BINARY X-RAY PULSAR 4U 1538-52 FROM ROSSI X-RAY TIMING EXPLORER OBSERVATIONS <i>George W. Clark</i>	L131
A MICROJET: A PROTOSTAR'S CRY AT BIRTH <i>Ray S. Furuya, Yoshimi Kitamura, H. Alwyn Wootten, Mark J. Claussen, Masao Saito, Kevin B. Marvel, and Ryohei Kawabe</i>	L135
FORMATION OF CUSPY DENSITY PROFILES: A GENERIC FEATURE OF COLLISIONLESS GRAVITATIONAL COLLAPSE <i>Ewa L. Łokas and Yehuda Hoffman</i>	L139
THE DENSITY STRUCTURE OF HIGHLY COMPACT H II REGIONS <i>José Franco, Stan Kurtz, Peter Hofner, Leonardo Testi, Guillermo García-Segura, and Marco Martos</i>	L143
SECONDARY FRAGMENTATION OF THE SOLAR AND HELIOSPHERIC OBSERVATORY SUNGRAZING COMETS AT VERY LARGE HELIOCENTRIC DISTANCE <i>Zdenek Sekanina</i>	L147
DETERMINATION OF FLARE HEATING AND COOLING USING THE TRANSITION REGION AND CORONAL EXPLORER <i>S. K. Antiochos, E. E. DeLuca, L. Golub, and R. A. McMullen</i>	L151

CONTENTS

v

COMPOSITIONAL VARIATION ON THE SURFACE OF CENTAUR 8405 ASBOLUS

L155

S. D. Kern, D. W. McCarthy, M. W. Buie, R. H. Brown, H. Campins, and M. Rieke

INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION

Inside Back Cover

INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION

Back Cover



